

*Hab.* Jebba, Upper Niger, October 1898 (*Dr. Cuthbert Christy*).

I have compared the types of these species with others in the collections in the British Museum and at Tring, and both the Hon. Walter Rothschild and Sir George Hampson agree with me that the two species are new to science.

LIII.—*A Revision of the Dismorphina of the New World, with Descriptions of new Species.* By ARTHUR G. BUTLER, Ph.D., F.L.S., F.Z.S., &c.

WHEN I revised the genera of Pierine Butterflies in the 'Cistula Entomologica' (vol. i. pp. 33-58) I admitted two genera of Dismorphina, viz. *Dismorphia*, with the upper radial of the primaries emitted from the end of the discoidal cell, and *Moschoneura*, with the same vein emitted from the subcostal vein beyond the end of the cell. A careful study of the neuration of all the species in the Museum series failed to show any other difference in neuration which was absolutely constant.

Under *Moschoneura* I placed the *nehemia* group, which has since been separated under the name *Pseudopieris* by the authors of the 'Biologia Centrali-Americana,' I think correctly, for although it has the neuration of *Moschoneura*, it differs considerably in form of wing and is evidently not a mimicking group.

The two other genera erected in the 'Biologia' have less claim to generic rank, inasmuch as they are based upon neurational differences which are far from being constant. *Acmepteron* is perhaps convenient as a division on account of the peculiar form of the primaries; but *Enantia* can only be arbitrarily separated as a group or section of *Dismorphia*, the position of the first subcostal branch of the primaries, upon which its authors relied, being unfortunately very variable, quite as much so as in the genus *Euchloe*; indeed, I find it emitted both before and at the end of the cell in examples of the same species, whilst in a closely allied species it is emitted well beyond the end. Even the Ithomeine character of *Dismorphia* does not form a trenchant distinction, because several admitted forms of *Enantia* have Ithomeine females.

The following is an account of the species, most of which are either in the general series or the Hewitson collection in the Museum.

## Genus PSEUDOPIERIS, Godm. &amp; Salv.

The species of this genus have the aspect of *Pieris* and are probably the most ancient of the New-World Dismorphina. They are all very closely related.

1. *Pseudopieris aequatorialis*.

*Leptalis aequatorialis*, Felder, Wien. ent. Monatschr. v. p. 75 (1861).

*Leptalis penia*, Hopffer, Stett. ent. Zeit. 1874, p. 334.

"Ecuador" (Felder); Pucartambo, Peru (*Whitely*). ♂, B. M.

♂, *P. penia*, hab.? Three examples. Ecuador. Coll. Hewitson.

Our specimen is the wet phase = *P. aequatorialis*, *P. penia* is intermediate, and the examples from Ecuador in the Hewitson series (mistaken for *P. nehemia* by Hewitson) represent the dry phase.

2. *Pseudopieris viridula*.

*Leptalis viridula*, Felder, Wien. ent. Monatschr. v. p. 75 (1861).

"Bogota" (Felder). Pucartambo and Rio Napo: B. M. Quito: coll. Hewitson.

The wet phase is unknown to me, but the intermediate we have from the Rio Napo and the dry from Pucartambo and (in the Hewitson series) from Quito.

3. *Pseudopieris nehemia*.

*Pieris nehemia*, Boisduval, Sp. Gén. Lép. i. p. 528 (1836).

*Leptalis cydno*, Doubleday, in Gray's Zool. Misc. p. 75 (1842).

Mexico, Venezuela, and Rio Grande: B. M. Minas Geraes and Rio Janeiro: coll. Hewitson.

I have not seen the wet phase, but Doubleday's type from Mexico represents the intermediate, and typical *P. nehemia* from all our more southern localities the dry.

## Genus MOSCHONEURA, Butler.

The species of this genus are capital imitations of the species of the Ithomeine genera *Scada* and *Aeria*.

1. *Moschoneura methymna*.

*Pieris methymna*, Godart, Enc. Méth. ix. p. 166 (1819).

Rio Janeiro. B. M. and coll. Hewitson.

2. *Moschoneura cyra*.

*Leptalis cyra*, Doubleday, Ann. & Mag. Nat. Hist. vol. xiv. p. 418 (1844).

Bahia. Type, B. M.

3. *Moschoneura ela*.

*Leptalis ela*, Hewitson, Equat. Lep. p. 82 (1877).

Ecuador. Type, coll. Hewitson.

4. *Moschoneura pinthæus*.

*Papilio pinthæus*, Linnæus, Mus. Lud. Ulr. p. 258 (1764).

*Papilio vocula*, Cramer, Pap. Exot. iv. pl. cccliii. C, D (1782).

*Leptalis amelina*, Hopffer, Stett. ent. Zeit. 1874, p. 332.

Para and Tapajos. B. M. and coll. Hewitson.

I can discover no difference in Hopffer's description to warrant the separation of his species; but in the Hewitson collection there is an imperfect example of an allied but apparently very distinct species, unfortunately without locality. It is more likely to be *M. eumelia*, var.

5. *Moschoneura eumelia*.

*Papilio eumelia*, Cramer, Pap. Exot. iii. pl. cclxxx. D (1782).

*Pieris enodia*, Godart, Enc. Méth. ix. p. 166 (1819).

Ega. B. M.

6. *Moschoneura theaphina*, sp. n.

Mimics *Ithomia theraphia*\* and is allied to *M. ithomia* (which probably mimics *I. kusa*). It can at once be distinguished by the unbroken character of the oblique, postmedian, sulphur-tinted white band on the primaries, which in *M. ithomia* is represented by two unequal spots.

Expanse of wings 45-48 millim.

Ecuador. Coll. Hewitson.

\* This species and its allies have been referred to *Seada*, the type of which is *S. phyllodoce*. In the latter species the lower radial of the primaries is given off above the angle of the discocellulars; but this proves to be an inconstant character. It, however, differs from the *alethia* group in that the costal vein is bent downwards towards its distal end so as almost to touch the subcostal, and the angle of the discocellulars of these wings is considerably less pronounced. The types of *Seada* and *Heteroscada* agree in structure, but *fenella* has nothing to do with *H. gazoria*; the name *Heteroscada* thus becomes obsolete.

7. *Moschoneura ithomia*.

*Leptalis ithomia*, Hewitson, Trans. Ent. Soc. ser. 3, vol. v. p. 562 (1867);  
Exot. Butt. iv., *Lep.* pl. viii. fig. 49 (1870).

Ecuador. Type, coll. Hewitson.

## DISMORPHIA.

## Section ENANTIA, Hübn.

If the characters assigned to *Enantia* were reliable it would be of advantage to use them, as in the case of *Pyrisitia* and *Sphenogona* (the characters of which are reliable), to break up a somewhat unwieldy genus; but unfortunately they vary not only in individuals of the same species, but to a slight extent on the opposite wings of the same specimen. For a section, the limits of which are somewhat uncertain, the name may perhaps be used in a subgeneric sense.

## Group I.

The "species," so called, of this group are very closely related, and, if bred, would probably have to be very greatly reduced; they differ chiefly in the width and form of the dark borders to the wings.

1. *Dismorphia galanthis*.

*Leptalis galanthis*, Bates, Journ. Entom. i. p. 234 (1861).

Ega: B. M. Amazons and Ecuador: coll. Hewitson.

2. *Dismorphia licinia*.

*Papilio licinia*, Cramer, Pap. Exot. ii. pl. cliii. E, F (1779).

*Papilio phronima*, Fabricius, Ent. Syst. iii. 1, p. 206 (1793).

Rio Janeiro: B. M. Cayenne and New Grenada: coll. Hewitson.

3. *Dismorphia lina*.

*Papilio lina*, Herbst, Natursyst. Schmett. v. p. 75, pl. lxxxix. figs. 3, 4 (1792).

*Leptalis dilis*, Boisduval, Sp. Gén. Lép. i. p. 427 (1836).

♂, Brazil: B. M. ♂ ♀, Rio Janeiro: coll. Hewitson.

I have very little doubt that this is merely a seasonal variety of the preceding species.

4. *Dismorphia mercenaria*.

*Leptalis mercenaria*, Felder, Wien. ent. Monatschr. v. p. 76 (1861).

"Venezuela" (Felder). Ecuador: coll. Hewitson.

This may possibly prove to be a wetter phase of *D. galanthis*.

5. *Dismorphia limnorina*.

*Leptalis limnorina*, Felder, Reise der Nov., Lep. ii. p. 139 (1865).

Rio Janeiro: B. M. Rio Janeiro and Espirito Santo: coll. Hewitson.

6. *Dismorphia aphrodite*.

*Leptalis aphrodite*, Felder, Reise der Nov., Lep. ii. p. 139 (1865).

Brazil: B. M. Rio Janeiro and Ecuador: coll. Hewitson.

This and the three following will probably prove to be varieties of one species.

7. *Dismorphia isodrita*.

*Leptalis isodrita*, Boisduval, Sp. Gén. Léop. i. p. 426 (1836).

Brazil (Boisduval). ♂ ♀, coll. Hewitson.

8. *Dismorphia Kollari*.

*Leptalis Kollari*, Lucas, Rev. et Mag. de Zool. 1852, p. 299.

♀. *Dismorphia cretacea*, Grose-Smith, Rhop. Exot. vol. ii., *Dism.* pl. iii. figs. 4, 5 (1897).

♂ ♀, Rio Janeiro. B. M.

9. *Dismorphia acutipennis*.

*Enantia acutipennis*, Butler, Entomologist, 1896, p. 26.

*Dismorphia acutipennis*, Grose-Smith & Kirby, Rhop. Exot. vol. ii., *Dism.* pl. iii. figs. 10, 11 (1897).

Trinidad (Hart). Type, B. M.

The acutely tipped primaries are badly shown in the illustration.

10. *Dismorphia marion*.

*Enantia marion*, Godman & Salvin, Biol. Centr.-Am., Rhop. ii. p. 184 (1889).

♀, Nicaragua. Coll. Hewitson.

## Group II.

In my opinion the *E. melite* group will eventually be

proved to consist of three variable species at most; but as there is at present no possibility of being certain, I keep them separate.

### 11. *Dismorphia citrinella*.

♂. *Leptalis citrinella*, Felder, Wien. ent. Monatschr. v. p. 77 (1861).

♀. *Leptalis flavia*, Felder, l. c. p. 76 (1861).

"Venezuela" (*Felder*). Bogota: B. M. Ecuador: coll. Hewitson.

### 12. *Dismorphia albania*.

*Leptalis albania*, Bates, Ent. Month. Mag. i. p. 6 (1864); Godman & Salvin, Biol. Centr.-Am., Rhop. p. 183, pl. lxiv. figs. 27, 28, ♂, pl. lxi. fig. 7 (1889).

*Dismorphia amalia*, Staudinger, Exot. Schmett. p. 25, "*D. cornelia*," pl. xv. (1884).

♂ ♂ ♀, Mexico: B. M. ♂, hab.?: coll. Hewitson.

### 13. *Dismorphia jethys*.

*Leptalis jethys*, Boisduval, Sp. Gén. Léop. i. p. 423 (1836).

*Leptalis cornelia*, Felder, Reise der Nov., Lep. ii. p. 140 (1865).

♂ ♀, Mexico: B. M. ♂, New Granada; ♀ ♀, Mexico and Nicaragua: B. M.

I believe the three preceding forms will prove to be variations of one species.

### 14. *Dismorphia melite*.

*Papilio melite*, Clerck, Icones, pl. xlv. fig. 5 (1764); Linnæus, Syst. Nat. i. 2, p. 755 (1767).

♂ ♂ ♀ ♀, Rio Grande, Rio Janeiro, and Espiritu Santo: B. M. New Granada, Rio Grande, and Rio Janeiro: coll. Hewitson.

A male in the Museum from Theresopolis and a second in the Hewitson collection seem to be intermediate between this species and *D. jethys*.

### 15. *Dismorphia theugenis*.

*Leptalis theugenis*, Doubleday, Ann. & Mag. Nat. Hist. ser. 2, vol. i. p. 124 (1848).

♂ ♂, Peru and Bolivia: type, B. M. Bolivia and Ecuador: coll. Hewitson.

## Group III.

16. *Dismorphia thermesia*.

*Pieris thermesia*, Godart, Enc. Méth. ix. p. 164 (1819).

*Leptalis thermesina*, Hopffer, Stett. ent. Zeit. 1874, p. 333.

♂♂ ♀♀, Rio Janeiro, Rio Grande, Venezuela, and Bogota: B. M. Rio Janeiro: coll. Hewitson.

## Group IV.

17. *Dismorphia critomedia*.

♂. *Enantia critomedia*, Hübner, Zutr. exot. Schmett. figs. 795, 796 (1832).

♂♀, Bogota: B. M. ♀, New Granada; ♂♀♀, Bolivia: coll. Hewitson.

In the primaries of this species the first subcostal vein is usually emitted a good distance before the end of the cell, but occasionally only just before the end. In the type of the genus (*E. melite*) it is either well before, at, or well beyond the end of the cell.

18. *Dismorphia crisis*.

♀. *Papilio crisis*, Drury, Ill. exot. Ent. iii. pl. xxxvii. figs. 1, 2 (1782).

♂♀♀, Brazil; ♂♀, Espiritu Santo: type, B. M. ♂♀♀, hab.?: coll. Hewitson.

In this species the first subcostal branch of the primaries seems to be always emitted before the end of the cell. We possess Drury's original type of this butterfly.

19. *Dismorphia fædora*.

*Leptalis fædora*, Lucas, Rev. et Mag. de Zool. 1852, p. 298.

♂♂ ♀♀, Venezuela. B. M.

In this local representative of *D. crisis* the first subcostal branch of the primaries is emitted either before or at the end of the cell.

20. *Dismorphia virgo*.

*Leptalis virgo*, Bates, Ent. Month. Mag. i. p. 5 (1864); Godman & Salvin, Biol. Centr.-Am., Rhop. ii. p. 184, pl. lx. figs. 14-16 (1889).

♂. *Dismorphia tubina*, Butler, Cist. Ent. i. p. 83 (1872); Lep. Exot. p. 124, pl. xlvi. figs. 6, 7 (1873).

♀. *Dismorphia lunina*, Butler & Druce, Cist. Ent. i. p. 111 (1872); Lep. Exot. p. 124, pl. xlvi. figs. 8, 9 (1873).

♀, Chiriqui: B. M. ♂♂, Costa Rica and Ecuador: coll. Hewitson.

In this species the first subcostal branch of the primaries is usually emitted well beyond the end of the cell, rarely at the end.

### 21. *Dismorphia euryope*.

*Leptalis euryope*, Lucas, Rev. et Mag. de Zool. 1852, p. 297; Godman & Salvin, Biol. Centr.-Am., Rhop. ii. p. 186, pl. lx. figs. 12, 13 (1890).

♂, Mexico; ♀?, Colombia. B. M.

### 22. *Dismorphia abilene*.

♀. *Leptalis abilene*, Hewitson, Exot. Butt. iv., *Lept.* vii. figs. 51 & 52 (as *L. teresa*, vide corrections) (1872).

♂ ♀ ♀ ♀, Ecuador. ♀ type, coll. Hewitson.

In the Hewitson cabinet the males are separated from the females and labelled "*euryope*"; but they are quite distinct from the insect figured by Hewitson (Exot. Butt. ii., *Lept.* iii. fig. 17, 1858).

### 23. *Dismorphia medora*.

*Leptalis medora*, Doubleday, Ann. & Mag. Nat. Hist. xiv. p. 420 (1844); Gen. Diurn. Lep. pl. v. fig. 4 (1847).

*Leptalis casta*, Kollar, Denkschr. Akad. Wiss. Wien, math.-nat. Cl. i. p. 360, pl. xlv. figs. 9, 10 (1850).

Venezuela, Colombia, Bogota: type, B. M. Ecuador: coll. Hewitson.

A variety (or possibly a local race) occurs also in Ecuador in which the oblique yellow belt of the primaries is replaced by a trifid bilobed oblique bar and a small transverse spot; of this form there is one example in the general series and another in the Hewitson collection.

### 24. *Dismorphia arcadia*.

*Leptalis arcadia*, Felder, Wien. ent. Monatschr. vi. p. 410 (1862); Reise der Nov., Lep. ii. p. 141, pl. xxii. figs. 1-3 (1865).

*Leptalis idonia*, Hewitson, Equat. Lep. p. 5 (1869); Exot. Butt. iv., *Lep.* pl. vii. figs. 44, 45 (1870).

Both varieties, Bogota: B. M. Ecuador: type, coll. Hewitson.

### 25. *Dismorphia lucilla*, sp. n.

*Leptalis arcadia*, Hewitson, in coll.

Nearest to *D. arcadia*, var. *idonia*; the yellow markings on the upper surface of the male much richer in colour



(gamboge rather than lemon-yellow); the spots representing the band on the primaries much more widely divided; the band on the secondaries completely divided on the third median branch and followed by a conical spot with its apex directed towards the outer margin: on the under surface entirely unlike *D. arcadia*, more nearly like *D. medorilla*; the secondaries conspicuously blotched across the centre with bright silvery patches.

Expanse of wings 58 millim.

The female is more like Felder's figure of the female of *D. arcadia* than the male is; it differs above in the streak-like character of the submedian marking on the primaries, in the orange suffusion of the oblique band beyond the cell, and in the distinctly orange wash over the apical portion of the yellow band on the secondaries; the fourth division of this band is completely divided by a brown wedge-shaped bar instead of enclosing a brown spot: the under surface somewhat resembles that sex of *D. medorilla*, but is altogether more yellow, the oblique band of the primaries more orange, and the secondaries conspicuously blotched with silver.

Expanse of wings 61 millim.

Ecuador. Types, coll. Hewitson.

#### 26. *Dismorphia medorina*.

*Leptalis medorina*, Hewitson, Ent. Month. Mag. xii. p. 9 (1875).

*Dismorphia medorina*, Grose-Smith & Kirby, Rhop. Exot. ii., *Dism.* i. figs. 9-11 (1896).

Bolivia. Type, coll. Hewitson.

#### 27. *Dismorphia medorilla*.

*Leptalis medorilla*, Hewitson, Equat. Lep. p. 81 (1877).

*Dismorphia medorilla*, Grose-Smith & Kirby, Rhop. Exot. ii., *Dism.* i. figs. 4-6 (1896).

Ecuador. Type, coll. Hewitson.

#### 28. *Dismorphia mirandola*.

*Leptalis mirandola*, Hewitson, Ent. Month. Mag. xiv. p. 180 (1878).

*Dismorphia discoloris*, Weymer, Stett. ent. Zeit. ii. p. 292 (1890).

*Dismorphia mirandola*, Grose-Smith & Kirby, Rhop. Exot. ii., *Dism.* i. figs. 7, 8 (1896).

Ecuador. Type, coll. Hewitson.

#### 29. *Dismorphia lua*.

*Leptalis lua*, Hewitson, Equat. Lep. p. 5 (1869); Exot. Butt. iv., *Lep.* pl. vii. figs. 53, 54 (1870).

Ecuador. Type, coll. Hewitson.

30. *Dismorphia hyposticta*.

*Leptalis hyposticta*, Felder, Wien. ent. Monatschr. v. p. 77 (1861);  
Reise der Nov., Lep. ii. p. 142, pl. xxii. figs. 7, 8 (1865).

♀, "Venezuela" (Felder). ♂, Ecuador: coll. Hewitson.

## Group V.

31. *Dismorphia oreas*.

*Leptalis oreas*, Salvin, Ann. & Mag. Nat. Hist. ser. 4, vol. vii. p. 416  
(1871).

*Enantia oreas*, Godman & Salvin, Biol. Centr.-Amer., Rhop. p. 186,  
pl. lx. figs. 17, 18 (1890).

Veragua.

32. *Dismorphia Lewyi*.

♂. *Leptalis Lewyi*, Lucas, Rev. et Mag. de Zool. 1852, p. 296.

♂. *Leptalis nasua*, Felder, Wien. ent. Monatschr. v. p. 76 (1861);  
Reise der Nov., Lep. ii. p. 141, pl. xxii. figs. 4-6 (1865).

♀. *Leptalis Kadenii*, Felder, Wien. ent. Monatschr. v. p. 77 (1861).

♂ ♀, Bogota: B. M. ♂ ♂ ♀ ♀, Bolivia: coll. Hewitson.

The females of this species and *D. leonora* vary so much  
that it is difficult to believe them conspecific; yet inter-  
mediates between the extremes exist.

33. *Dismorphia leonora*.

*Leptalis leonora*, Hewitson, Equat. Lep. p. 7 (1869); Exot. Butt. iv.,  
Lep. pl. v. figs. 39-41 (1870).

♀, Ecuador: B. M. ♂ ♂ ♀ ♀, Ecuador: type, coll.  
Hewitson.

34. *Dismorphia Schaussi*.

*Leptalis Schaussi*, Dognin, Le Nat. 1891, p. 85.

♀, Loja.

Does not this realize one's ideas as to the female of  
*E. lycosura*?

35. *Dismorphia lygdamis*.

*Leptalis lygdamis*, Hewitson, Equat. Lep. p. 7 (1869); Exot. Butt. iv.,  
Lep. pl. v. figs. 32-34 (1870).

♂ ♂ ♀, Ecuador. Type, coll. Hewitson.

36. *Dismorphia lycosura*.

*Leptalis lycosura*, Hewitson, Exot. Butt. ii., Lep. pl. iv. figs. 18, 20  
(1860).

Peru.

I am not sure that the section for which the name *Enantia* was proposed ought not to end here, because at this point the females begin to assume an Ithomeine or Acræine character; but as I desire to leave *Enantia* as understood by its resuscitators (its limitations being purely arbitrary), the following may be included:—

## Group VI.

37. *Dismorphia deione*.

♂. *Leptalis deione*, Hewitson, Ent. Month. Mag. vi. p. 63 (1869); Exot. Butt. iv., *Lep.* pl. vi. figs. 37, 38 (1870).

♀. *Dismorphia haguesa*, Butler, Cist. Ent. i. p. 82 (1872); *Lep. Exot.* p. 124, pl. xlv. fig. 3 (1873).

♂ ♂, Colombia: B. M. ♂ ♂ ♀, Nicaragua: coll. Hewitson.

38. *Dismorphia tapajona*.

♀. *Leptalis tapajona*, Bates, Journ. Entom. i. p. 231 (1861).

♂. *Leptalis zaela*, Hewitson, Exot. Butt. ii., *Lep.* pl. iii. fig. 16 (1858).

♂ ♂ ♀ ♀, Ecuador (type of *D. zaela*). Coll. Hewitson.

39. *Dismorphia laja*.

♀. *Papilio laja*, Cramer, Pap. Exot. iii. pl. cccxxii. C, D (1779).

“Surinam” (*Cramer*). ♀, Cayenne: coll. Hewitson.

The male of this species cannot differ very greatly from that of *D. tapajona*.

40. *Dismorphia teresa*.

*Leptalis teresa*, Hewitson, Equat. *Lep.* p. 8 (1869); Exot. Butt. iv., *Lep.* pl. vii. figs. 50-52 (1870).

*Leptalis praxidice*, Hewitson, Trans. Ent. Soc. 1870, p. 153.

Ecuador. Types, coll. Hewitson.

41. *Dismorphia hippotas*.

*Leptalis hippotas*, Hewitson, Ent. Month. Mag. xii. p. 10 (1875).

*Dismorphia hippotas*, Grose-Smith & Kirby, Rhop. Exot. ii., *Dism.* pl. iii. figs. 8, 9 (1897).

Ecuador. Type, coll. Hewitson.

42. *Dismorphia melia*.

♂. *Pieris melia*, Godart, Enc. Méth. ix., Suppl. p. 814 (1823).

♀. *Leptalis eumara*, Doubleday, Ann. & Mag. Nat. Hist. ser. 2, vol. i. p. 122 (1848).

♀. *Leptalis acraeoides*, Hewitson, Trans. Ent. Soc. ser. 2, vol. i. p. 99, pl. xi. fig. 1 (1850).

♀. *Dismorphia mimetica*, Staudinger, Exot. Schmett. p. 25, pl. xv. (1884).

♂ ♀, Theresopolis; ♂ ♂, Brazil: B. M. ♂ ♂ ♀ ♀, Espiritu Santo and Rio Janeiro; ♀, Minas Geraes: coll. Hewitson.

The females vary a good deal in the colouring of the bands across the primaries and the distinctness or otherwise of the black veins.

#### 43. *Dismorphia lysianax*.

*Leptalis lysianax*, Hewitson, Exot. Butt. ii., *Lep.* pl. iv. fig. 19 (1860).

♀, Upper Amazon. Type, coll. Hewitson.

#### 44. *Dismorphia tricolor*.

*Dismorphia tricolor*, Grose-Smith & Kirby, Rhop. Exot. ii., *Dism.* pl. ii. figs. 1, 2 (1897).

♀, hab.?

This is a very good copy of a *Eueides* occurring in New Granada.

We now come to the more typical species of *Dismorphia*.

### SECTION DISMORPHIA, Hübn.

#### Group VII.

#### 45. *Dismorphia carthesis*.

*Leptalis carthesis*, Hewitson, Trans. Ent. Soc. ser. 3, vol. vii. 1869, p. 71; Exot. Butt. iv., *Lep.* pl. vi. figs. 35, 36 (1870).

Demerara. Type, coll. Hewitson.

#### 46. *Dismorphia avonia*.

*Leptalis avonia*, Hewitson, Trans. Ent. Soc. ser. 3, vol. v. p. 563 (1867); Exot. Butt. iv., *Lep.* pl. vii. figs. 46-48 (1870).

Quito. Type, coll. Hewitson.

#### 47. *Dismorphia leuconia*, sp. n.

Allied to the preceding species, but differing in the clear greyish-white semihyaline spots on the apical half of the primaries, the paler yellow discoidal streak of primaries and

median belt of secondaries, the latter being broader and shorter than in *D. avonia*.

Expanse of wings, ♂ 50 millim., ♀ 53 millim.

♂♂, Ecuador: B. M. ♂♀, Ecuador: type, coll. Hewitson.

48. *Dismorphia limonea*, sp. n.

♂. Also allied to *D. avonia*, but considerably smaller; the whole of the markings on the primaries sulphur-yellow (rather deeper than in *D. avonia*), the discoidal streak broader; the median belt on the secondaries rather deeper yellow and of more even width, its outer edge being straight.

♀. With all the yellow marks paler than in *D. avonia*; the dark veining on the basal area of the primaries obsolete; the whitish costal streak on the secondaries regular, not terminating in a lobe-like spot.

Expanse of wings, ♂ 39 millim., ♀ 43 millim.

♂♀, Ecuador. Type, coll. Hewitson.

The last three species are so evidently distinct to the eye that it is annoying to discover how little difference in pattern one is able to describe.

49. *Dismorphia theonoe*.

*Leptalis theonoe*, Hewitson, Exot. Butt. i., *Ent. & Lep.* pl. i. figs. 2, 5 (1852).

♂, Tapajos: type, B. M. ♂♀, Cayenne: coll. Hewitson.

50. *Dismorphia melanoë*.

*Leptalis melanoë*, Bates, Journ. Entom. i. p. 332 (1861); Trans. Ent. Soc. xxiii. pl. lv. fig. 2 (1862).

♂♂♀♀, São Paulo. Coll. Hewitson.

51. *Dismorphia Ribbei*.

*Leptalis Ribbei*, Godman & Salvin, Ann. & Mag. Nat. Hist. ser. 5, vol. ii. p. 265 (1878).

*Dismorphia Ribbei*, iid. Biol. Centr.-Amer., Rhop. ii. p. 178, pl. lxi. fig. 4 (1890).

"Chiriqui" (*Godm. & Salv.*). ♂♂♀♀, Colombia: B. M.

52. *Dismorphia alterata*, sp. n.

Colouring of the preceding species, but the male differs in having a small cuneiform costal patch beyond the middle and

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an oblique dash rather larger than that of the female near the outer margin; the female differs in having the band beyond the middle of the primaries uninterrupted; both sexes show hardly a trace of the reddish suffusion on the costa and apical border of primaries below, but quite as much or more bright orange on the secondaries.

Expanse of wings, ♂ 52 millim., ♀ 50 millim.

♂ ♂ ♀, Colombia. Type, B. M.

### 53. *Dismorphia fortunata*.

♂. *Leptalis fortunata*, Lucas, Ann. Soc. Ent. France, 1854, p. 55, pl. iii. fig. 1.

♂. *Leptalis antherize*, Hewitson, Exot. Butt. ii., *Lep.* pl. iii. fig. 12 (1858).

♂. *Leptalis argochloe*, Bates, Trans. Linn. Soc. xxiii. pl. lvi. fig. 6 (1862).

"Mexico" (*Lucas*). ♂ ♀, Nicaragua: coll. Hewitson.

### 54. *Dismorphia leuconoe*.

*Leptalis leuconoe*, Bates, Journ. Entom. i. p. 232 (1861); Trans. Linn. Soc. xxiii. pl. lvi. fig. 4 (1862).

São Paulo. ♀, coll. Hewitson.

### 55. *Dismorphia erythroe*.

*Leptalis erythroe*, Bates, Journ. Entom. i. p. 232 (1861); Trans. Linn. Soc. xxiii. pl. lvi. figs. 1-3 (1862).

"São Paulo." ♂, Amazon: B. M. ♂ ♀, coll. Hewitson. Hewitson has a slight variety from Ecuador.

### 56. *Dismorphia flammula*, nom. n.

*Leptalis theonoe*, var., Bates, Trans. Linn. Soc. xxiii. pl. lv. fig. 4 (1862).

♀, Ega: B. M. Amazon: coll. Hewitson.

If this and the following are varieties, they must be tolerably constant and frequent ones; but it appears to me that whereas *D. erythroe* copies *Leucothyris ilderina*, *D. flammula* more nearly resembles *Hymenitis sarepta*, and that whereas *D. fervida* is a copy of *Leucothyris priscilla*, *D. lysinoe* is stated by Bates himself to be "quite unlike any *Ithomia* found in the whole region," and he regards it as a mimic of *Stalachtis Duvalii*. It is hardly probable that mere sports of the same species would be formed in imitation of species belonging to different families or even different genera.

57. *Dismorphia fervida*, nom. n.

*Leptalis theonoe*, var., Bates, Trans. Linn. Soc. xxiii. pl. lv. fig. 6 (1862).

♀ ♀, Ega. B. M.

58. *Dismorphia lysinoe*.

*Leptalis lysinoe*, Hewitson, Exot. Butt. i., *Eut. & Lep.* pl. i. figs. 3, 4 (1852).

♂ ♂ ♀ ♀, Ega: B. M. ♂ ♀ ♀, Amazon: type, coll. Hewitson.

59. *Dismorphia lysinoides*.

♀. *Dismorphia lysinoides* (as ♂), Staudinger, Exot. Schmett. p. 25, pl. xv. (1884).

“Cauca” (*Staudinger*).

Very close to *D. lysinoe*, but with wider transparent areas to the wings. If all the preceding species are to be regarded (in the Batesian fashion) as varieties of *D. theonoe*, Staudinger's species is hardly worthy to be called a sport; but I cannot believe in such improbable variability in any species unless it can be shown to have a seasonal value.

60. *Dismorphia siloe*.

*Leptalis siloe*, Hewitson, Exot. Butt. ii., *Lep.* pl. iii. fig. 14 (1858).

♂, New Granada. Type, coll. Hewitson.

The following species and others described with it were incorrectly referred to in Grose-Smith and Kirby's 'Rhopalocera Exotica' as “Butler, MS.” They had then been published quite fifteen months.

61. *Dismorphia nella*.

*Dismorphia nella*, Butler, Entom. 1896, p. 26; Grose-Smith & Kirby, Rhop. Exot. ii., *Dism.* pl. ii. figs. 6-8 (1897)

♂, Bogota: type, B. M. ♂ ♂ ♀ ♀, New Granada: coll. Hewitson.

62. *Dismorphia theucharila*.

*Leptalis theucharila*, Doubleday, Ann. & Mag. Nat. Hist. ser. 2, vol. i. p. 123 (1848); Hewitson, Exot. Butt. i., *Eut. & Lep.* pl. i. figs. 6-8 (1852).

♂ ♀ ♀, Venezuela: type, B. M. ♂ ♀, coll. Hewitson.

Here follows a little group of species having somewhat the colouring of the more typical forms of the section *Enantia*, but which I believe to be related to the *D. theucharila* and *D. rhetes* groups, to which the outline of the wings apparently allies it.

### Group VIII.

#### 63. *Dismorphia pimpla*.

*Leptalis pimpla*, Hopffler, Stett. ent. Zeit. 1874, p. 333.

♂ ♂ ♀ ♀, Bolivia. Coll. Hewitson.

#### 64. *Dismorphia lelex*.

♂. *Leptalis lelex*, Hewitson, Equat. Lep. p. 6 (1869); Exot. Butt. iv., Lep. pl. v. fig. 24 (1870).

♀. *Leptalis zathoe* (*L. lelex* ♀ in text), Hewitson, Exot. Butt. iv., Lep. pl. v. fig. 25 (1870).

♂ ♂ ♀ ♀, Ecuador. Type, coll. Hewitson.

#### 65. *Dismorphia proserpina*.

*Dismorphia proserpina*, Grose-Smith & Kirby, Rhop. Exot. ii., *Dism.* pl. iii. figs. 1-3 (1897).

"Roraima" (*Grose-Smith*). ♂ ♂ ♀ ♀, not labelled: coll. Hewitson.

The description of this species states that the lighter parts of the wings are "primrose-yellow"; this corresponds with the examples in the Hewitson collection. The figures represent these parts of the wings as milky whitish and the male with a brown subcostal patch as in *D. pallidula*. Has the wrong species been figured, or is the colouring defective?

#### 66. *Dismorphia pallidula*.

*Dismorphia pallidula*, Butler, P. Z. S. 1874, p. 363; Godman & Salvin, Biol. Centr.-Amer., Rhop. ii. p. 176, pl. lx. figs. 9-11 (1890).

♂ ♀, Colombia: B. M. ♂ ♀, Costa Rica: coll. Hewitson.

#### 67. *Dismorphia othoe*.

*Leptalis othoe*, Hewitson, Trans. Ent. Soc. ser. 3, vol. v. p. 562 (1867); Exot. Butt. iv., Lep. pl. v. figs. 26-28 (1870).

♂ ♀, Ecuador: B. M. ♂ ♂ ♀ ♀, coll. Hewitson.



68. *Dismorphia zathoe*.

♂. *Leptalis zathoe*, Hewitson, Exot. Butt. ii., *Lep.* pl. iii. fig. 15 (1858).  
*Leptalis core*, Felder, Wien. ent. Monatschr. v. p. 77 (1861).

♂, Bogota: type, B. M. ♀, New Granada: coll. Hewitson.

69. *Dismorphia lysis*.

*Leptalis lysis*, Hewitson, Equat. Lep. p. 6 (1869); Exot. Butt. iv., *Lep.* pl. v. figs. 29-31 (1870).

♂ ♂ ♀ ♀, Ecuador. Type, coll. Hewitson.

## Group IX.

70. *Dismorphia rhetes*.

*Leptalis rhetes*, Hewitson, Exot. Butt. ii., *Lep.* pl. ii. fig. 9 (1857).

"Colombia" (*Boisduval*).

The following seems extremely close to *D. rhetes*; but as we only have a single example, it is impossible to say whether or not it is absolutely constant to pattern:—

71. *Dismorphia Hewitsoni*.

*Dismorphia Hewitsoni*, Kirby, Trans. Ent. Soc. 1881, p. 355; Grose-Smith & Kirby, Rhop. Exot. ii., *Dis.* pl. ii. figs. 9-11 (1897).

Ecuador. ♂ type, coll. Hewitson.

## Group X.

72. *Dismorphia orise*.

*Leptalis orise*, Boisduval, Sp. Gén. Léop. i. p. 415 (1836); Hewitson, Exot. Butt. ii., *Lep.* pl. ii. figs. 10, 11 (1857).

♂, Tapajos: B. M. ♂, Ecuador; ♂ ♂ ♀, not labelled: coll. Hewitson.

73. *Dismorphia sororna*.

*Dismorphia sororna*, Butler, Cist. Ent. i. p. 82 (1872); *Lep.* Exot. p. 122, pl. xlvi. figs. 1, 2 (1873).

Costa Rica.

Allied to *D. cordillera*.

74. *Dismorphia myris*.

*Dismorphia myris*, Godman & Salvin, Biol. Centr.-Amer., Rhop. ii. p. 178 (1889).

Costa Rica and Panama.

Closely allied to *D. cordillera*.

75. *Dismorphia cordillera*.

*Leptalis cordillera*, Felder, <sup>8</sup>Wien. ent. Monatschr. vi. p. 409 (1862);  
Reise der Nov., Lep. ii. p. 145, pl. xxii. fig. 11 (1865).

♂, Bogota: B. M. ♀, not labelled: coll. Hewitson.

76. *Dismorphia larunda*.

*Leptalis larunda*, Hewitson, Equat. Lep. p. 4 (1869); Exot. Butt. iv. Lep. pl. vi. figs. 42, 43 (1870).

♂ ♂ ♀, Ecuador. Type, coll. Hewitson.

## Group XI.

77. *Dismorphia discrepans*.

♂. *Dismorphia discrepans*, Butler, Entom. 1896, p. 26.

♂, New Granada. Type, B. M.

Var. with yellow markings of primaries confluent.

♂ ♀, New Granada. Coll. Hewitson.

78. *Dismorphia rhomboidea*.

♂. *Dismorphia rhomboidea*, Butler, Entom. 1896, p. 27; Grose-Smith & Kirby, Rhop. Exot. ii., *Dism.* pl. ii. figs. 3-5 (1897).

♂, "Nauta" = E. Peru: type, B. M. ♀, not labelled: coll. Hewitson.

As already stated in the 'Entomologist,' it is probable that the female of this species and other unlabelled examples in the Hewitson collection formed part of Buckley's Ecuador series.

79. *Dismorphia arsinoe*.

*Leptalis arsinoe*, Felder, Reise der Nov., Lep. ii. p. 143, pl. xxii. figs. 9, 10 (1865).

♂ ♀, New Granada. Coll. Hewitson.

80. *Dismorphia amphione*.

*Papilio amphione*, Cramer, Pap. Exot. iii. pl. ccxxxii. E, F (1782).

♂ ♀, Brazil: B. M. ♀, coll. Hewitson.

81. *Dismorphia beroe*.

*Leptalis beroe*, Lucas, Rev. et Mag. de Zool. 1852, p. 295.

"Bogota" (*Lucas*).

I have seen nothing which quite answers to the description of this species.

82. *Dismorphia egaena*.

*Leptalis egaena*, Bates, Journ. Entom. i. p. 230 (1861); Trans. Linn. Soc. xxiii. pl. lvi. fig. 7 (1862).

♂ ♂ ♀ ♀, Ega: B. M. ♂ ♂ ♀, Amazon: coll. Hewitson.

83. *Dismorphia Broomeæ*, sp. n.

♂. Allied to *D. egaena*, but the longitudinal trifold streak on the primaries divided by the median vein bright fiery orange, more sharply defined than in *D. amphione*; the oblique postmedian band bright yellow, washed in the centre with bright orange, the discocellular black marking crescentic, the last division of the band completely separated, forming an elongated oval spot; the three subapical spots forming a regular oblique series, smaller and more widely separated from the postmedian band than in *D. egaena*, but less so than in *D. amphione*; the white patch on the secondaries purer than in *D. egaena* and the oblique belt from abdominal margin bright fiery orange.

The female differs from that sex of *D. egaena* in its altogether brighter colouring (more like that of *D. amphione*), in the narrower tawny-washed oblique band on the primaries, with small discocellular black spot and divided terminal yellow spot.

Expanse of wings, ♂ 65 millim., ♀ 70 millim.

♂ ♂, Trinidad (*Lady Broome and J. H. Hart*); ♂ ♀ ♀, Venezuela (*Dyson*): B. M. ♂ ♂, Caraccas: coll. Hewitson.  
Local form? ♂ ♀ ♀, Ecuador: coll. Hewitson.

84. *Dismorphia praxinoe*.

♀. *Leptalis praxinoe*, Doubleday, Ann. & Mag. Nat. Hist. xiv. p. 419 (1844).

*Leptalis amphithea*, Felder, Reise der Nov., Lep. ii. p. 144 (1865).

*Dismorphia arsinoides*, Staudinger, Exot. Schmett. p. 25 (*arsinoe*), pl. xv. (1884).

♂ ♀ ♀, Mexico (type); ♂, Colombia: B. M. ♂ ♀, Nicaragua: coll. Hewitson.

85. *Dismorphia Perrensi*.

*Leptalis Perrensi*, Gosse, Entom. xiii. p. 195 (1880).

♂ ♂, Rio Grande: B. M. ♂ ♂, not labelled: coll. Hewitson.

86. *Dismorphia astyocha*.

*Dismorphia astyocha*, Hübner, Zutr. exot. Schmett. figs. 485, 486 (1825).

♂ ♂, Espiritu Santo, Brazil; ♀ ♀, Organ Mountains, Rio Janeiro: B. M. ♂ ♀ ♀, Rio Janeiro: coll. Hewitson.

87. *Dismorphia astynome*.

*Leptalis astynome*, Dalman, Anal. Ent. p. 39 (1823).

*Dismorphia polyneola*, Hübner, Zutr. exot. Schmett. figs. 723, 724 (1832).

♀ ♀, Brazil: B. M. ♂ ♂ ♀ ♀, Rio Janeiro: coll. Hewitson.

## Group XII.

88. *Dismorphia eunoe*.

*Leptalis eunoe*, Doubleday, Ann. & Mag. Nat. Hist. xiv. p. 419 (1844); Gen. Diurn. Lep. pl. v. fig. 3 (1847).

♀, Oaxaca, Mexico. Type, B. M.

89. *Dismorphia cubana*.

*Leptalis cubana*, Herrich-Schäffer, Corresp.-Blatt zool.-mineral. Ver. Regensb. xvi. p. 120 (1862).

*Dismorphia cubana*, Gundlach, Cont. Ent. Cubana, p. 81 (1881);

Grose-Smith & Kirby, Rhop. Exot. ii., *Dism.* pl. i. figs. 1-3 (1896).

*Leptalis spio*, var. *a*, Boisduval, Sp. Gén. Lép. i. p. 421 (1836).

Cuba.

90. *Dismorphia spio*.

*Pieris spio*, Godart, Enc. Méth. ix. p. 167 (1819).

*Leptalis spio*, Hewitson, Exot. Butt. ii., *Lep.* pl. iv. figs. 21-23 (1860)

♂ ♂ ♀, St. Domingo. B. M.

## Genus ACMEPTERON.

Although this genus was founded upon a secondary sexual character which is not absolutely constant, it contains species having an outline of wing differing to a certain extent from anything else in the genus. The subcostal vein of the

secondaries in the male more often than not emits its first branch before or at the end of the cell, but not infrequently the two branches fork from a short footstalk beyond the cell, as in the female.

I have little doubt that this group of species branched off from *Dismorphia* as a development from *D. nasua* and allies, which curiously approach it in coloration and somewhat in outline of wing.

1. *Acmepteron atthis*.

♀. *Leptalis atthis*, Doubleday, in Gray's Zool. Misc. p. 75 (1842).

♂. Very like *A. nemesis*, but without the yellow veins and streaks on basal half of primaries; the yellow patch on secondaries narrower, owing to the presence of a dark brown dentate-sinuate border which extends along the outer margin to the submedian vein.

Expanse of wings 67 millim.

♂♂ ♀♀, Mexico. B. M.

This is the species figured as *Dismorphia nemesis* by Staudinger (Exot. Schmett. pl. xv.).

2. *Acmepteron nemesis*.

*Pieris nemesis*, Latreille, in Hombroun & Bonpland's Obs. Zool. ii. p. 78, pl. xxxv. figs. 7, 8 (1811-19).

♂♂, Venezuela, Bogota, Colombia, Bolivia, E. Peru: B. M. ♂♂ ♀♀, Ecuador: coll. Hewitson.

3. *Acmepteron viridifascia*.

*Dismorphia viridifascia*, Butler, Cist. Ent. i. p. 83 (1872); Lep. Exot. p. 123, pl. xlvi. figs. 4, 5 (1873).

Costa Rica.

4. *Acmepteron cinerascens*.

*Leptalis cinerascens*, Salvin, Ann. & Mag. Nat. Hist. ser. 4, vol. vii. p. 415 (1871).

*Acmepteron cinerascens*, Godman & Salvin, Biol. Centr.-Amer., Rhop. ii. p. 180, pl. lx. fig. 8 (1889).

Costa Rica.

5. *Acmepteron lala*.

*Acmepteron lala*, Godman & Salvin, Biol. Centr.-Amer., Rhop. ii. p. 181, pl. lxiv. figs. 25, 26 (1889).

Guatemala.